IN THE CLAIMS

1-27. (Previously canceled)

28. (Currently amended) A method for treating Alzheimer's disease in a patient comprising the step of subjecting said patient to a therapeutically effective amount of an agent which is capable of crossing the blood brain barrier, wherein said agent modulates the interaction within the central nervous system between a divalent or trivalent cation and/or heparin with amyloid precursor protein (APP) of said patient~~, with the proviso that said agent is not EDTA~~.

29. (Previously added) The method according to claim 28, wherein the cation is a divalent cation.

30. (Previously added) A method according to claim 29, wherein a therapeutically effective amount of a zinc-binding agent is administered to said patient.

31. (Previously amended) A method according to claim 30, wherein said zinc-binding agent is selected from sodium citrate, 1,2-diethyl-3-hydroxypyridin-4-one, and 1-hydroxyethyl-3-hydroxy-2-methylpyridin-4-one.

32. (Previously added) The method according to claim 30, wherein said zinc-binding agent is orally administered to said patient.

33. (Previously added) A method according to claim 29, wherein said divalent cation is zinc.

34. (Currently amended) A method for altering protease-mediated digestion of amyloid precursor protein (APP) in a patient with Alzheimer's disease, comprising the step of administering to said patient to an effective amount of an agent which is capable

of crossing the blood brain barrier, wherein said agent modulates the interaction within the central nervous system between a divalent or trivalent cation and/or heparin with amyloid precursor protein (APP) of said patent~~, with the proviso that said agent is not EDTA~~.

35. (Previously added) The method according to claim 34, wherein the cation is a divalent cation.

36. (Previously added) The method according to claim 35, wherein said divalent cation is zinc.

37. (Previously added) The method according to claim 34, wherein said agent is a zinc-binding agent.

38. (Previously added) The method according to claim 37, wherein said zinc-binding agent is selected from sodium citrate, 1,2-diethyl-3-hydroxypyridin-4-one, and 1-hydroxyethyl-3-hydroxy-2-methylpoyridin-4-one.

39. (Previously added) The method according to claim 37, wherein said zinc-binding agent is orally administered to said patient.

40. (Currently amended) A method of reducing incorrect protease-mediated processing of amyloid precursor protein (APP) in a patient with Alzheimer's disease comprising the step of administering said patient to an effective amount of an agent which is capable of crossing the blood brain barrier, wherein said agent modulates the interaction within the central nervous system between a divalent or trivalent cation and/or heparin with amyloid precursor protein (APP) of said patient~~, with the proviso that said agent is not EDTA~~.

41. (Previously added) The method according to claim 40, wherein the cation

is a divalent cation.

42. (Previously added) The method according to claim 41, wherein said divalent cation is zinc.

43. (Previously added) The method according to claim 40, wherein said agent is zinc-binding agent.

44. (Previously added) The method according to claim 43, wherein said zinc-binding agent is selected from sodium citrate, 1,2-diethyl-3-hydroxypyridin-4-one, and 1-hydroxyethyl-3-hydroxy-2-methylpyridin-4-one.

45. (Previously added) The method according to claim 43, wherein said zinc-binding agent is orally administered to said patient.